

**DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS**

**COMPLETE STATEMENT
OF
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BEFORE THE

**SUBCOMMITTEE ON FISHERIES, WILDLIFE AND WATER
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

ON

**STATUS OF BIOLOGICAL OPINIONS ON
FEDERAL COLUMBIA RIVER POWER SYSTEM**

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INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am Colonel Eric Mogren, Deputy Division Engineer, Northwestern Division, U.S. Army Corps of Engineers. I am testifying on behalf of the Honorable Dr. Joseph W. Westphal, Assistant Secretary of the Army for Civil Works. Thank you for this opportunity to discuss the status of the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) Biological Opinions on operations of the Federal Columbia River Power System.

BACKGROUND

The Corps constructed and operates twelve major dams in the Columbia River Basin that affect the habitat and migration of anadromous salmon and steelhead, Kootenai River white sturgeon, and bull trout — all listed under the Endangered Species Act (ESA). The dams are authorized under project authorities in the Rivers and Harbors Acts of 1935, 1945, 1946, 1950, and 1962 for multiple uses including flood control, power production, navigation, recreation, fish and wildlife, irrigation and municipal and industrial water supply.

Bonneville, The Dalles, John Day and McNary dams on the lower Columbia River and Ice Harbor, Lower Monumental, Little Goose and Lower Granite dams on the lower Snake River are in the migratory path of several species of salmon and steelhead. Two upstream storage dams operated by the Corps — Dworshak in Idaho and Libby in Montana — contribute to

salmon restoration actions through flow augmentation. Operations of Dworshak, Libby and Albeni Falls, a multipurpose project on the Pend Oreille River in Idaho, also affect white sturgeon and bull trout habitat. The twelfth dam is Chief Joseph in the mid-Columbia River.

The Corps Northwestern Division office in Portland and the Walla Walla, Portland and Seattle District offices are involved in efforts to improve conditions for ESA listed aquatic species throughout the Columbia River Basin.

ENDANGERED SPECIES ACT / BIOLOGICAL OPINIONS

Although Columbia River Basin returns of adult salmon and steelhead have been the strongest this year in several decades, overall many Columbia River Basin fish stocks are in decline. In 1991, NMFS listed the Snake River sockeye salmon as endangered under the ESA. In 1992, the Snake River spring/summer and fall chinook salmon were listed as threatened. USFWS has listed two species of resident fish in the basin — Kootenai River white sturgeon in September 1994, and bull trout in June 1998. Over the last several years, nine more Columbia and Snake River salmon and steelhead stocks have been listed under the ESA, bringing the total to twelve listed salmon and steelhead stocks within the basin.

No single factor is solely responsible for the decline of the salmon, and it will require efforts across all life cycle influences to restore listed stocks. Recovery efforts must address the following four life cycle areas, referred to as the All-H's: harvest, habitat, hatcheries, and the hydropower system. The Corps' primary role in recovery efforts is to implement measures at its dams and reservoirs to assist recovery of salmon and steelhead and other listed fish populations.

The salmon, steelhead, bull trout and sturgeon ESA listings triggered the requirement for Federal agencies to consult with NMFS and USFWS on hydro-system operations and configuration affecting the listed species. Formal consultation begins with a Biological Assessment from the "action" agencies, i.e., the Corps, Bonneville Power Administration (BPA) and the Bureau of Reclamation (BoR), and culminates in hydropower Biological Opinions from the ESA regulatory agencies. The action agencies are currently operating under 1995 Biological Opinions from NMFS and USFWS and 1998 and 2000 Supplemental Biological Opinions to address additional salmon and steelhead species listed since 1995. The Opinions contain measures to avoid jeopardizing the continued existence of listed salmon, steelhead and white sturgeon species and to avoid adversely modifying designated critical habitat.

The action agencies transmitted a new Biological Assessment to NMFS and USFWS in December 1999, because the current Biological Opinions were written pending results of long-term studies. The 1999 Biological Assessment addresses proposed operation and identifies studies for long-term configuration of the Federal Columbia River Power System (FCRPS). The Biological Assessment incorporates measures that were put into place under the 1995 NMFS and USFWS Biological Opinions, a 1998 supplemental, a 1999 Biological Assessment on listed bull trout and sturgeon, and a 1999 draft Biological Opinion pertaining to listed Columbia River chum salmon. Both near- and long-term actions intended to improve fish passage are identified.

Near-term actions include:

- Flow augmentation – Release of water from storage or headwater reservoirs to meet flow targets in the lower river for salmon and steelhead.
- Reservoir operations – Operations of headwater projects to provide for spawning and recruitment of Kootenai River white sturgeon, and minimize rapid fluctuation in both reservoirs and unimpounded river reaches for improved bull trout habitat conditions; and release of water from Dworshak Dam for temperature control.
- Spill measures – Water passed at a dam through a spillway rather than being sent through the turbines to guide fish away from the turbines, thereby reducing the percentage of turbine-related mortality.
- Fish transportation – Juvenile salmon and steelhead collected at dam sites on the lower Snake and Columbia rivers and placed in specially designed barges to be transported down river and released below Bonneville Dam.
- Predator control programs – Programs intended to help protect juvenile salmon from other species that prey on them, such as northern pikeminnow and Caspian terns.

Long-term actions in the Biological Assessment include:

- Lower Snake River survival improvement study – complete feasibility level study to analyze alternatives for long-term configuration and operation of the lower Snake River dams, including breaching.
- Water quality – planned and ongoing studies intended to improve dissolved gas and temperature conditions.
- Passage improvements – continue turbine studies to identify operational and structural modifications to make turbine passage less harmful to fish; testing of surface collectors; bypass improvements; and additional fish transport facilities.

STATUS OF BIOLOGICAL OPINION

Consultations triggered by the 1999 Biological Assessment are ongoing with NMFS and USFWS and the three action agencies — the Corps, BPA and BoR. We are currently reviewing the draft Biological Opinions released July 27, 2000, for 60-day Federal agency, State and Tribal review. Consultations are addressing long-term operations and configuration of the FCRPS needed to ensure survival of the listed stocks throughout the Columbia River Basin. There are still some measures to be worked further for the final Biological Opinions; however, we believe that we can reach agreement on most major issues and overall direction. We anticipate that a series of performance measures and standards will allow us to judge the success of our efforts. The measures in the Biological Opinion and the All-H Paper continue to reflect the need to look beyond the hydrosystem and take into account actions in all the life-cycle areas.

Consultations on the draft NMFS Biological Opinion are addressing several major operational and configuration issues, including future configuration of four Snake River dams, study of potential flood control modifications, and water quality.

The NMFS July 27, 2000, draft Biological Opinion does not call for immediate breach of the Lower Snake River dams. Rather, the draft calls for aggressive actions in the FCRPS to be taken over the next 10 years. It contains performance measures to be met, with check-ins at certain points during the 10-year period. If performance measures are not met, or if listed stocks

experience dangerous declines, the agencies would again consider the question of more drastic measures, such as dam breach, within the context of actions for all listed salmon and steelhead stocks throughout the basin. The Corps supports this approach as long as actions across all H's are considered equally; performance standards and milestones are realistic; there is an aggressive monitoring and evaluation program to gauge performance; and, if the jeopardy standards are not met after the specified period, other hydro and non-hydro actions would be considered in a reconsultation process. To minimize start-up delay in the event of a lower Snake River dam breach decision in the future, we continue to work with NMFS on the timing and appropriate level of effort for engineering and economic mitigation evaluation.

Current operations of Corps storage reservoirs are conducted to provide adequate flood control protection. The draft Biological Opinion calls upon the Corps to conduct a detailed, systemwide, multi-year study of flood control limits to determine whether flexibility exists for providing additional fish flows by reducing the amount of flood control storage required. We consider this to be a major undertaking, and, if included in the final Biological Opinion, we would seek appropriate Congressional approval to begin this study.

The NMFS draft Biological Opinion also specifies measures the Corps, BoR and BPA could take to preserve and restore habitat in the Columbia River estuary, in tributaries, and in mainstem areas to further improve the survival and recovery of listed species in critical spawning, rearing and estuary stages. We strongly support these actions as part of an All-H approach to species restoration. The Opinion also continues to support evaluation of surface bypass systems for juvenile fish, turbine passage improvements testing, and other advancements in fish passage technology.

The draft USFWS Biological Opinion requests adjustments to the operations and ramping rates at Albeni Falls and Libby Dam to balance needs of listed resident fish (Kootenai River white sturgeon and bull trout). In addition, USFWS is asking the Corps to continue for the next six years a study of alternative pool elevations at Albeni Falls to increase Kokanee spawning for bull trout food source. This would affect NMFS operations for salmon. The draft USFWS Biological Opinion also addresses actions at Libby Dam to allow increased flows to achieve flow objectives for sturgeon, while controlling additional total dissolved gas. Several operational measures in the draft Biological Opinions would require coordination with Canada.

FEDERAL CAUCUS AND BASIN-WIDE RECOVERY STRATEGY

Actions for fish in the hydropower system must be considered in the broader context of the entire Columbia River Basin, for multiple species, and across the salmon life-cycle influences. To provide this broader context, a Federal Caucus is developing a basin-wide strategy for recovery of Columbia River Basin fish. The Federal Caucus includes representatives from NMFS, USFWS, BoR, Bureau of Indian Affairs, Bureau of Land Management, the Environmental Protection Agency, BPA, U.S. Forest Service, and the Corps.

In December 1999, the Federal Caucus released a draft "All-H Paper," which laid out options for action in the areas of hydropower, harvest, hatchery management, and habitat improvements to be integrated into a comprehensive strategy for recovery of the listed species.

Those options were grouped into the following four alternatives in the draft All-H Paper for the purpose of stimulating public discussion: A) Dam Removal – breach four lower Snake River dams; B) Harvest Constraints – retain the lower Snake River dams, limit salmon harvest, improve habitat, and improve conditions in the hydropower system; C) Aggressive Non-Breach – defer decision on breaching lower Snake River dams, aggressive actions in other H’s; and D) Maximum Protections – breach lower Snake River dams, aggressive actions in other H’s.

The All-H Basinwide Strategy is meant to provide a framework for recovery actions. It is a common Federal approach to look at all aspects of life cycles in a comprehensive manner. This has created a context and a common operating concept for Federal agencies to work with the States and Tribes, to coordinate and collaborate on technical and policy decisions for Columbia Basin fish recovery. The Federal agencies have begun a joint consultation with the 13 Columbia River tribes framed around the All-H Paper as a basis for constructive discussion.

Following a public comment period and series of public meetings on the draft All-H Paper, the Federal Caucus prepared a revised paper which was released for public review on July 27 concurrently with the draft Biological Opinions. This paper identifies a preferred strategy of aggressive actions across all life-cycle H’s, with a deferred decision on dam breaching.

LOWER SNAKE RIVER STUDY

The question of whether to breach four lower Snake River dams has been a focus in regional discussions concerning recovery of Columbia Basin stocks, even though such an action would have direct influence on the recovery of only four of the listed 12 salmon and steelhead stocks in the basin. The Corps of Engineers Lower Snake River Juvenile Salmon Migration Feasibility Study includes evaluation of such an action. This study was initiated in response to the reasonable and prudent alternative in the 1995 and later NMFS Biological Opinions to evaluate long-term alternatives for the four lower Snake River dams.

The primary objective of the lower Snake River study is to develop a plan to improve migration conditions for salmon and steelhead in the lower Snake River and to contribute to the recovery of these stocks. This study addresses the four lower Snake River dams – Ice Harbor, Lower Monumental, Little Goose, and Lower Granite. It does not address specific actions on dams and reservoirs on the Columbia River, or other factors in salmon decline besides operation of these projects. The geographical scope is the lower Snake River, from its confluence with the Columbia River extending upstream approximately 140 miles to the city of Lewiston, Idaho.

The study examines the following four major alternatives for the lower Snake River dams:

- 1) maintain the existing fish passage system with current and planned improvements;
- 2) maximize transportation of juvenile fish;
- 3) make major system improvements such as surface bypass, gas abatement measures, and turbine passage improvements; and
- 4) implement permanent natural river drawdown by breaching the dams.

In December 1999, the Corps released a draft Environmental Impact Statement (EIS) on these alternatives for public review. In order to allow all affected parties in the region to address the issues within the broader context of other ongoing regional efforts for Columbia River Basin fish, a preferred alternative was not identified in the draft EIS. In conjunction with the Federal Caucus, the Corps held 15 public meetings in February and March 2000 throughout the region (Oregon, Idaho, Washington, Montana, and Alaska).

The Corps continues to progress toward a final EIS. The Corps is now processing the considerable volume of comments received and is analyzing the substantive issues raised. At this point in the evaluation, all four alternatives are still under consideration. The measures called for in the draft/final Biological Opinions will be a factor in the Corps' choice of a preferred alternative in the final EIS. We anticipate that we will have a final EIS with a preferred alternative identified in March 2001. If the recommendations in the final EIS and Record of Decision include dam breaching, Congressional authorization and appropriations would be sought.

CLOSING

The successful conclusion of the Biological Opinion consultations and the integration of the Biological Opinions and the All-H Paper depend upon the continued coordination and cooperation of the Federal agencies. We are making good progress. The agencies, of course, have different and sometimes conflicting views, but we are all committed to restoring the many stocks of listed Columbia River Basin fish. We look to the Congress for continued support of these efforts and will continue to work with you and keep the lines of communication open.

Mr. Chairman, this concludes my testimony. I would be happy to answer any questions.